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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,485

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Matthias Illing

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EXAMINER

MILLER, SAMANTHA A

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

02/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/567,485

**Applicant(s)**

ILLING ET AL.

**Examiner**

SAMANTHA A. MILLER

**Art Unit**

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3-6, 9, 13, 15-18 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-6, 9, 13, 15-18, 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Receipt of applicant's amendment filed on 11/13/2008 is acknowledged.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6, 9, 13, 15-18, and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over STRAUB (2004/003602) which is an English translation of DE 102 13 154 published 3/13/2003, in view of Dussault (5,261,415) in further view of Mayer (WO099/48756, refer to US 6,551,184 for line and column numbers as being the equivalent English translation).

STRAUB teaches:

3. The control unit (31) for the circulating air and/or intake air portion (30) controls the size of the circulating air portion (18) in the passenger compartment of the vehicle (para.0016).

4. The size of the circulating air portion (18) in the passenger compartment controlled by the control unit moves in a pre- definable range of a tolerable hazardous gas concentration in the passenger compartment (para.0016).

5. The control unit for the circulating air and/or intake air portion (30) increases the circulating air portion (18) in the passenger compartment when there is an increase in the outside temperature of the passenger compartment (para.0003 and 0016).

6. The control unit (31) for the circulating air and/or intake air portion (30) is a part of a cooling/heating device (para.0016 and para.0005).

9. The control unit for the circulating air and/or intake air portion adjusts the circulating air portion in the passenger compartment to approx. 80% when a person is located in the passenger compartment (optimum value that can be set by passenger9. The control unit for the circulating air and/or intake air portion adjusts the circulating air portion in the passenger compartment to approx. 80% when a person is located in the passenger compartment (optimum value that can be set by passenger (para.0013).

21. Detecting a hazardous gas concentration (by 36) of CO<sub>2</sub> (para.0007) in the passenger compartment;; generating a triggering signal (40-42) based on the detected hazardous gas concentration; supplying the temperature-compensated triggering signal (lco<sub>2</sub>) to a control unit (31) for the circulating air (18) and/or intake air portion (30) in a passenger compartment;; with the control unit, regulating the circulating air and/or intake air portion (30) in the passenger compartment, the control unit inducing the supply of the passenger compartment in an alternating manner with either exclusively circulating air or exclusively intake air as a function of exceeding or falling short of a hazardous gas concentration threshold value (para.0016),

Regarding claims 13, 15-18, 20, and 22 please refer to the rejection of claims 3-6, 9, and 21.

STRAUB teaches the invention above, however STRAUB does not teach a photometric gas measurement which would be temperature compensated.

Dussault (5,261,415) teaches:

The carbon dioxide concentration is measured by the temperature compensated, senses the temperature, photometric sensor (col.1 ll.49-54) at wavelengths of 4.2  $\mu\text{m}$  and 4.3  $\mu\text{m}$  (since the wavelength of CO.sub.2 is 4.24  $\mu\text{m}$  this would be a matter of rounding up or down the measurement, col.2 ll.44-50) and a reference wavelength between 3.8  $\mu\text{m}$  and 4.0  $\mu\text{m}$  (reference wavelength determined to fit detector used being a optimum value, col.3 ll.10-20).

Therefore, it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the biosensor of STRAUB to have the ranges or values of the photometric sensor of Dussault in order to monitor the concentration of CO.sub.2 in breathing gases with a small lightweight unit (Dussault, col.1 ll.7-12).

STRAUB in view of Dussault teaches the photometric sensor as described above. However STRAUB in view of Dussault does not teach 0.2% by volume CO.sub.2.

Mayer (6,551,184) teaches:

The hazardous gas concentration threshold value in the passenger compartment is selected at 0.2% by volume CO.sub.2 (.15% is approximately .2%, col.2 ll.37-45) detected by a temperature compensated sensor (col.4 ll.15-22, col.5 ll.1-7, and claims 1-6).

Therefore, it would have been obvious to a person having ordinary skills in the art at the time the invention was made to have modified the sensor of Chatterjee in view of Dussault to have these values of Mayer in order to correspond to the Pettenkofer threshold above which signs of fatigue and/or irritations of the eyes or respiratory tract may occur (Mayer, col.2 ll.37-45)

### ***Response to Arguments***

Applicant's arguments with respect to claims 3-6, 9, 13, 15-18, and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR '1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension

fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha A. Miller whose telephone number is 571-272 9967. The examiner can normally be reached on Monday - Thursday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on 571-272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samantha Miller  
Examiner  
Art Unit 3749  
2172009

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749

Application/Control Number: 10/567,485  
Art Unit: 3749

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